Fisheries Resource Monitoring Program

Guidelines for Establishing Project Objectives for Harvest Monitoring and Traditional Ecological Knowledge Fisheries Proposals and Investigation Plans

This section is intended to provide additional direction and clarification for writing objectives for fisheries proposals and investigation plans in the harvest monitoring and traditional ecological knowledge (TEK) data type for the Fisheries Resource Monitoring Program. In general, two types of projects are funded within this data type -- projects that focus on a research question (either qualitative as in the case of a TEK project, or quantitative as in the case of a harvest monitoring or assessment project) or projects that address a specific issue or problem (as in the case of convening a statewide group to understand and improve harvest collection methods, or convening a group to develop different approaches to incorporate TEK into management). For both types of projects, objectives are a key component of the project design. Both types of projects begin with a research question or issue, and this question or issue is then broken down into objectives or types of information or data sets that one needs to address the research question or issue. Objectives should relate directly to the need or the research hypothesis or question; they are specific, measurable outcomes that help to solve a problem, address an issue, or test a hypothesis.

Investigators focusing on a research question should refer to the "Guidelines for Establishing Project Objectives for Biological Fisheries Investigations." While the guidelines are directed at biological projects, the points discussed apply to all projects focusing on a research question (i.e., reasons for why objectives need to be specified in terms of estimates and tests; the importance of linking objectives directly to the research question; the fact that objectives involve evidence that either confirms or disconfirms a hypothesis or explanation, and the importance of establishing statistically sound project objectives).

For projects addressing a problem or issue, objectives indicate what you will achieve and should be concise, specific, concrete, measurable, attainable in a given time period, and directly relate to the need. If you include numbers, make sure that they are achievable. Do not confuse objectives with methods: objectives refer to specific, measurable outcomes, whereas methods are how you address the objectives. There are several types of objectives; descriptions of each type and examples follow:

- 1. <u>Behavioral/performance</u> A human action is identified that will occur within a specified time frame or at an expected proficiency level.
 - Identify, recruit and train 6 technicians to assume responsibility for conducting harvest surveys by the end of the second year of the project.
 - Present research findings in person to tribal councils in the three study communities to evaluate the project results and to generate topics to explore in follow-up TEK interviews.
 - By the end of the first year of the project, interview five elders or active fishermen in each study community about their ecological knowledge of salmon population

trends, causes for high and low salmon abundance, changes in the mix of salmon species, and changes in salmon harvest patterns.

- 2. <u>Process</u> The manner in which a behavior or activity occur is stated, including a specific time frame.
 - Within six months of beginning the project, we will document and analyze the major methods utilized to collect TEK, and identify those with the greatest success.
 - Within the first year of the project, two primary knowledge gaps for key subsistence species in three regions will be identified.
 - Within first year of the project, evaluate data for topical, chronological and geographic data gaps.
 - Summarize key differences between pre-commercial and modern subsistence fisheries as reflected in ANCSA data and provide analysis of how this may be incorporated into contemporary fisheries management.
- 3. <u>Product</u> A tangible item that will result from the project is identified, and the date it will be completed is clearly stated. Completion of an annual, performance or final report is <u>not</u> a project objective; it is a project deliverable.
 - By the end of the second project year, five regional inventories of existing TEK studies will be developed.
 - > By the end of the project, we will develop a manual for applying qualitative information to management.
 - By the end of the project, develop regional inventories of key informants and their particular knowledge specialty.
 - Produce a working plan outlining one or more possible long-term, sustainable approaches to regional fisheries harvest assessment, based on 3 tribal councils' recommendations.

As you can see, objectives are specific and achievable. Parameters to be measured are identified. Timelines are provided. Each objective should identify a specific action, issue, or event to be accomplished within a specific time frame. Objectives must also clearly tie back in to the need for and goal(s) of the project. As described above, it is appropriate to have <u>process</u> objectives, but they need to be clearly articulated, with time and other parameters established.

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